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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,660	09/08/2003	Klaus-Hinrich Borchers	4568	1986
21553	7590	09/25/2006	EXAMINER	
FASSE PATENT ATTORNEYS, P.A.			LE, TAN	
P.O. BOX 726			ART UNIT	
HAMPDEN, ME 04444-0726			PAPER NUMBER	
			3632	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,660

Applicant(s)

BORCHERS, KLAUS-HINRICH

Examiner

Tan Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-27 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) 26,27 and 29-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-25 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the fourth office action for application serial number 10/10/658,660. This application contains claims 22-42. Claims 1-21 and 28 have been canceled. Claim 42 has been added. Claims 26-27 and 29-41 were withdrawn.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 1,804,478 to Parker.

As to claim 22, Parker discloses a flexible multiple conduit and spacing support member (See Fig. 1, for example) comprising basic structure substantially as claimed which includes a plurality of flexible conduits/guard hoses (22, 20) (the material of collar being relatively stiff but having sufficient resilience etc. (col. 1, line 93) or (fabricated conduit of water proof fiber (col. 1, line 9) and (col. 2, line 93) these characteristics are flexible), each having an inner diameter, each conduit/guard hose comprising an outward facing first contour; and at least one spacer (21) positioned between two neighboring conduits/guard hoses of the plurality conduits/guard hoses, the at least one spacer having two oppositely facing second contours, the outwardly facing first contours and the oppositely facing second contours forming matching junctions (between conduits and spacer), wherein each of said oppositely facing second contours contacts a circumferential portion less than 180-degree of a respective outwardly facing first

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contour and wherein the matching junctions formed directly between said at least one spacer and said two neighboring flexible conduits/guard hoses consist of a bonding means forming one piece of unitary junction, except for using or installing the flexible multiple conduit unit or guard hose to an aircraft. However, to have use, connect or install such guard hose/conduit unit on the aircraft is consider a matter of design choice in utilizing it's applicability in industries where multiple cables or conductors are required to be strengthen or spaced apart in order to prevent twisting or stranding as well as to protect insulated conductors/cables to increase signal carrying. In addition, to have connect or install *on the aircraft as being claimed is also* deemed obvious over Parker because it was obvious that the device can be connected or installed at any location that's suitable for the intended purpose, which has no limited in Parker's teaching.

As to claim 23-24, Parker also discloses the claimed invention substantially as claimed except for the plurality of the spacers and conduits/guard hoses. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a plurality of conduits/guard hoses along the number of required spacers, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

As to claim 25, Parker also discloses such claimed limitations wherein the outwardly facing first contour is convex and wherein said two oppositely facing second contours are concave.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paker in view of US Patent No. 4,443,657 to Hill et al.

Paker discloses substantially as claimed as discussed above except for the flexible conduit and the at least one spacer being made out of polytetraflouroethylene.

Hill et al. teaches an improved multi-conductor cable includes a plurality of inner layers each substantially surrounding one of the conductors; with the inner layer (including flexible conduit and at least one spacer) being formed of polytetraflouroethylene to reduce the problem of insufficient flexibility and difficulty of connecting flat or ribbon cables to insulation displacement connectors while increase a good electrical and thermal properties and to achieve an economical lightweight of multiconductors.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the material of the flexible conduit and at least one spacer of Paker to include the material of polytetraflouroethylene as in Hill et al. in order to reduce the problem of insufficient flexibility and difficulty of connecting flat or ribbon cables to insulation displacement connectors while to increase a good electrical and thermal properties and to achieve an economical lightweight of multiconductors to be installed which is very desirable on the aircraft.

Response to Arguments

3. Applicant's arguments with respect to claims 22-25 and 42 have been considered but are moot in view of the new ground(s) of rejection. The new ground of rejection is

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necessitated by the amendment. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Additional Prior art:

5,286,924 to Loder et al.

4,301,838 to Bignell

4,301,838 to Bignell

The above patents disclose various types of multiconduit and spacing supports

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818.

The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tan Le
August 29, 2006.



ANITA KING
PRIMARY EXAMINER